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ABSTRACT

This report, which investigates turnaround time for interlibrary loans, presents a 1-month study of the interlibrary loan (ILL) process operating in the Western Slope areas of Colorado during 1980. It comprises introductory material presenting the importance, scope and limitations of the study, problem statement, hypothesis and term definitions; a review of the literature on interlibrary loans; analysis and interpretation of data collected from libraries in the Southwest, Pathfinder and Three Rivers sections of the Colorado Western Slope; and conclusions and recommendations on ILL procedures for the Western Slope. Sixteen figures provide data on the regional library service systems in Colorado and the amount of time needed for various stages in the ILL process. Appendices include samples of the forms and accompanying letter used in the survey and six tables giving figures for the number of libraries participating; the number of filled and unfilled ILL requests from the study period; the longest turnaround time for each step in the ILL procedure; and the median turnaround time for all types of requests studied (an average of 9 days), author/title requests (9 days), periodical requests (12 days), and subject requests (7 days). An 18-item bibliography is attached. (ESR)

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INTERLIBRARY LOAN TIME AND MOTION STUDY

COLORADO WESTERN SLOPE

by

Sharon D. Thomas

May 1981

Southwest Regional Library Service System
PO Box 411
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IR 010363

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A very special thanks is added here for all the librarians and staff who helped to make this study possible by filling out all the data on the pink and blue forms.

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CHAPTER 1

IMPORTANCE OF THE STUDY

With the avalanche of materials being published yearly in the United States alone, it is imperative that sharing of resources continues to expand in this country. Interlibrary loan is an attempt to make available to everyone a vast choice of materials, no matter where they live.

Interlibrary loan has reached proportions such that Palmour includes information on how many interlibrary loans have taken place nationally on a yearly basis in academic libraries. Palmour's estimate for requests received in academic libraries for 1972/73 (the fourth projected year following the last year for which he was able to collect statistics) was 2,224,000.[1] In order to estimate the present and future volume of interlibrary loan activity involving all types of libraries, Rolland Stevens uses Palmour's figures as a basis for a more complete figure in A Feasibility Study of Centralized and Regionalized Interlibrary Loan Centers. His figure for all types

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[1] Vernon E. Palmour and others, A Study of the Characteristics, Costs, and Magnitude of Interlibrary Loans in Academic Libraries (Westport, Conn.: Greenwood Pub., 1972), p. 51.

of libraries was more than 10,500,000 in 1972/73.[2]

But there are limitations as to the effectiveness of interlibrary loans even though the user rate is rising yearly.

> Users are ultimately interested in the success of filling their requests, but equally important for success is the time it takes to receive the desired material. A filled request which arrives too late is the same as a nonfill to the requestor; therefore elapsed time is a most significant aspect of the interlibrary loan process.[3]

This 'turnaround time' is the area of interlibrary loan which this researcher addresses. In this study 'turnaround time' is the amount of time it takes to complete an interlibrary loan transaction. This time begins at the point when the request was made by the user and ends with delivery of the requested item to the user, or response that the item is unavailable.

In November 1978, a document delivery study was completed by Michael A. Newsham for the Colorado Western Slope.[4] The purpose of this report was:

> to provide a comprehensive study of methods of delivery of interlibrary loan materials to and on

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[2]Rolland E. Stevens, A Feasibility Study of Centralized and Regionalized Interlibrary Loan Centers, U.S., Educational Resources Information Center, ERIC Document ED 076 206, 1973, p. 21.

[3]Jane G. Rollins, "The New York State Interlibrary Loan Program, NYSILL 1975-76 Annual Report," Bookmark. Summer 1977, p. 114.

[4]Michael A. Newsham, Colorado Western Slope Document Delivery Study (Durango, Co. : Southwest Regional Library Service System, 1978), et passim.

the Western Slope of Colorado and to show a cost comparison of these methods.[5]

The recommendations from his report have been implemented on the Colorado Western Slope.

But the problem still remains that interlibrary loan turnaround time is still too slow to and on the Colorado Western Slope.

Virginia Boucher, in her study, Colorado Library Network Plan, lists several tasks for developing interlibrary loan which include the need for studies on the fastest way to deliver a document requested on interlibrary loan. In addition, she feels more efficient and effective interlibrary loan can be achieved in Colorado by coordinating the already existing interlibrary loan network. Detailed statistics are being collected on interlibrary loan traffic flow, but she suggests continued study be done on costs of service, library to library traffic characteristics, and response times.[6]

The present study being undertaken carries these suggestions a step further. The turnaround time for interlibrary loan is evaluated through a time and motion study of the interlibrary loan process to and on the Western Slope in Colorado. The intent of the time and motion study is to provide some knowledge of the steps in the interlibrary loan process that need to be changed or improved within the existing Colorado network plan.

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[5]Ibid, p. 1.

[6]Virginia Boucher, Colorado Library Network Plan (Denver : Colorado State Library, 1977), p. 22.

STATEMENT OF THE PROBLEM

What interlibrary loan procedures might be improved to speed up the interlibrary loan process to, and on the Western Slope of Colorado?

HYPOTHESIS

It will become apparent that a time delay not only occurs in the delivery system but also at the borrowing library, the system headquarters and the lending library.

DEFINITIONS OF TERMS

Interlibrary Loan.

> An interlibrary loan, hereafter referred to as ILL is a transaction in which library materials are made available by one library to another for use by a library customer. These materials can be used for the purposes of study, instruction, information, recreation or research. They can be in the form of print or non-print (films, microforms, and photocopy).[7]

Western Slope of Colorado.

> The Pathfinder Regional Library Service System, the Three Rivers Regional Library Service System, and the Southwest Regional Library Service System straddle both sides of the Continental Divide in the area commonly known as the Western Slope.[8] (See Figure 1).

Regional Library Service System. In Colorado this is an "organization of libraries established to provide cooperative interlibrary services within a designated

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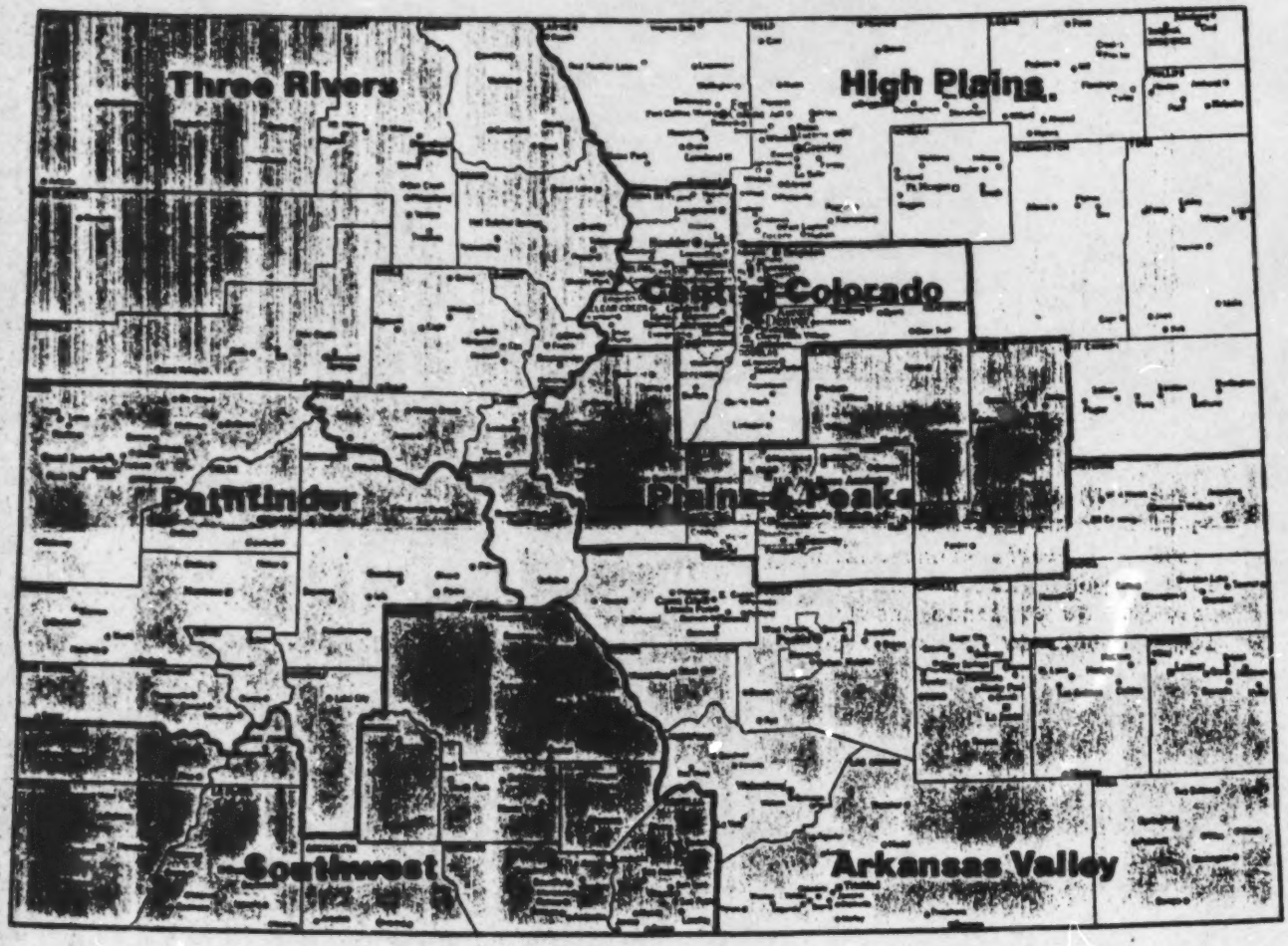
[7]Newsham, op. cit., p. 4.

[8]Ibid, p. 1.

Regional Library Service Systems in Colorado



Three Rivers

Population	84,200
Square Miles	20,445
Counties	10
Public Libraries	13(13)
School Districts	16(16)
State Institutions	1
Academic Libraries	3 (3)
Special Libraries	3
Boards of Cooperative Services	2

Pathfinder

Population	112,625
Square Miles	12,790
Counties	7
Public Libraries	11(11)
School Districts	13(13)
State Institutions	2 (2)
Academic Libraries	4 (2)
Special Libraries	4 (2)
Boards of Cooperative Services	2 (2)

Southwest

Population	82,300
Square Miles	14,738
Counties	11
Public Libraries	15(15)
School Districts	23(17)
State Institutions	1
Academic Libraries	2 (2)
Special Libraries	4 (3)
Boards of Cooperative Services	3 (2)

High Plains

Population	300,300
Square Miles	18,013
Counties	9
Public Libraries	32(32)
School Districts	40(31)
State Institutions	0
Academic Libraries	5 (5)
Special Libraries	1 (1)
Boards of Cooperative Services	4 (2)

Central Colorado

Population	1,438,400
Square Miles	5,045
Counties	8
Public Libraries	19(19)
School Districts	21 (9)
State Institutions	8 (2)
Academic Libraries	25 (9)
Special Libraries	134(8)
Boards of Cooperative Services	2 (2)

Plains and Peaks

Population	302,500
Square Miles	9,23[illegible]
Counties	5
Public Libraries	10(10)
School Districts	29(24)
State Institutions	1
Academic Libraries	5 (3)
Special Libraries	12 (2)
Boards of Cooperative Services	3 (1)

Arkansas Valley

Population	245,300
Square Miles	23,407
Counties	13
Public Libraries	21(21)
School Districts	39(27)
State Institutions	7 (5)
Academic Libraries	4 (4)
Special Libraries	4 (1)
Boards of Cooperative Services	3 (1)

State Totals

Population	2,565,625
Square Miles	103,677
Counties	63
Public Libraries	121(121)
School Districts	181(135)
State Institutions	19 (9)
Academic Libraries	48 (28)
Special Libraries	166 (17)
Boards of Cooperative Services	17 (10)

Publicly supported libraries are eligible for system membership.

Population: July 1975
Colorado Division of Planning, Demographic Section

(Number of System Members)

CSL: 9-78

geographical area. Membership may include any type of library which is publicly supported....."[9]

Time delay. A slowdown in the ILL process from the time it takes the borrowing library to place the Ill request to the receiving of the item by the borrowing library.

Delivery System. "A document delivery system is the means used to transport an ILL item from a lending library to a borrowing library."[10] In the Colorado Western Slope the United States Postal Service has been found to be the most cost-effective delivery system studied.[11]

Borrowing Library. The library requesting an ILL.

System Headquarters. Each regional library service system in Colorado has a headquarters that serves as the link between the borrowing and lending libraries in the ILL process.

Lending Library. The library receiving and responding to an ILL request either by sending out the item to the borrowing library or responding that the item is unavailable.

BCR. Bibliographic Center for Research located in Denver to provide access to materials out of the state.

CRC. The Colorado Resource Center, which is the Denver Public Library, that has been contracted by the Colorado

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[9] Ibid, p. 4.

[10] Ibid.

[11] Ibid, p. 42.

State Library to provide materials which are unavailable within the System.

SCOPE OF THE STUDY

This study attempted to gather data which would reflect the median turnaround time it takes for the ILL process on the Colorado Western Slope. From these findings improvement and changes were suggested to speed up the turnaround time.

The interlibrary borrowing process was covered by Newsham in his document delivery study, which showed the overview of the interlibrary borrowing process used by the three library systems on the Western Slope.[12]

For the purposes of this study, the following procedures were followed.

Size of Sample

This study used all libraries in the Southwest, Pathfinder and Three Rivers systems.

Length of Study

Interlibrary loan activity was observed over a one month period from April 14 to May 14, 1980.

Sampling Procedure

From the three Systems on the Colorado Western Slope all libraries, that had participated in ILL in the

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[12]Ibid, pp. 5-9.

past were used. If information on past usage was unavailable from the System office, the libraries in question were used in the study. Each type of library was represented from each of the three systems: public library, school, academic, special, Board of Cooperative Service and state institution, except for one system which did not have a state institution.

So, this accounted for the total of 167 libraries included in the study out of a total of 225.

Time and Motion Model

There were three methods used to collect all the data on ILL transactions:

1. On site visitations or phone calls were made to a borrowing library, a system headquarters, a lending library within a system, the Colorado Resource Center (CRC), which is the Denver Public Library, the Bibliographic Center for Research (BCR), and the University of Colorado at Boulder. The CRC was included since it has been contracted by the Colorado State Library to provide materials which are unavailable within the Systems, while the BCR provides access to materials out of the state, and the University of Colorado is a lending library often used within the state by the Systems. The on site visitations and phone calls provided the various tasks that would be timed at each step of the ILL process, and thus helped to formulate the forms used in the following methods.

2. Forms were filled out by each sample library, which included borrowing libraries, lending libraries and

Systems headquarters. Some libraries used both borrowing and lending forms because they did both processes. CRC and BCR provided their daily logs with appropriate data for each of the three systems included in the study. Each form showed the times of the various ILL steps (see appendix 1-a, 1-b, and 1-c). Forms were filled out for a period of one full month. A copy of the letter that accompanied the forms is seen in appendix 2.

3. Media times were tabulated in two ways so that a comparison could be made for validity: the first added median times from each ILL step necessary to complete the entire ILL process, while the second way used the median time taken to receive a request according to the borrowing libraries' forms. A comparison of the two was then made.

LIMITATIONS OF THE STUDY

This study does not include any other systems in Colorado, and therefore some unique features of the Western Slope will become apparent. Since this area of Colorado is mountainous and prone to inclement weather, delivery of ILL materials presents an automatic delay in the ILL process, But the delivery between libraries, which could be 30 to 50 miles average distance apart, is not a factor to be addressed in this study as the matter has been most effectively analyzed by Newsham in his study on document delivery.[13]

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[13]Ibid, et passim.

Also, the ILL process will be tabulated according to turnaround time, not quantity of ILL requests. Nor will all ILL requests be considered. Films and computer searches will be omitted from this project.

With the arrival of Ohio College Library Center (OCLC) on computer in the systems' headquarters some of the ILL process will be speeded up. This study does not include the OCLC access for ILL transactions.

So, the delivery system, certain ILL requests, quantity of requests, and OCLC access will be excluded from this study.

CHAPTER 2

REVIEW OF THE LITERATURE

The reviewer of written materials for this study found a wide range of articles dealing with various facets of interlibrary loan: document delivery, loan costs, filled and unfilled requests, ILL lending patterns, and ILL policies. But on the area of turnaround time statistics very little research is in print; although recommendations to improve and thus speed up the ILL process has been studied.

Both Newsham[14] and Stevens[15] consider time delays to occur at the borrowing library, which includes acceptance, verification, and preparation of the request; the system headquarters; delivery of the ILL item; and at the lending library, which searches the catalog, checks the records, and packages the item.

A time and motion study is felt to be an essential need in order to simplify internal procedures, augment staff and to pinpoint priorities, in the study by Pan

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[14] Ibid, p. 44.

[15] Stevens, op. cit., pp. 26-27.

and Miller[16] on document delivery service.

Actual times and turnaround times are tabulated by several authors. But the different studies of the time are difficult to compare since some studies report on total time elapsed from sending the request out from the borrowing library to the receipt of the material; while some consider the amount of time the request is in the lending library until the material is shipped out.[17]

In the study of academic libraries made by Palmour and others at Westat Research Inc., for the Association of Research Libraries, it is clear that about 20 percent of the time, the material requested is supplied within five days of initiation of the request; about 50 percent of the time within ten days; and about two-thirds of the time it is available within fifteen days. Palmour also shows it takes less total time to supply photocopy material than original. Also this study only included requests that could be filled.[18]

In the 1975-76 annual report for the New York State Interlibrary Loan (NYSILL) program, Rollins shows

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[16]Elizabeth Fan and Ron Miller, Materials Transfer a Report of a Pilot Document Delivery Service November 1969 June 1970, U.S., Educational Resources Information Center, ERIC Document ED 056 721, 1971, p. 29.

[17]Rolland E. Stevens, "A Study of Interlibrary Loan," College and Research Libraries, 35:341, September, 1974.

[18]Palmour, op. cit., pp. 47, 48.

how requests have taken longer to fill from the previous year; it took 4 days for 90 percent of all NYSILL requests to clear the State compared to 3.5 days the previous year, and 7.5 days to clear the network as a whole compared to 6.5 days the year before.[19]

In a study by West and Koch only 41 percent of the requests for borrowing were filled within 19 days, and 42 percent remained unfilled at the end of the five-week data collection period. But 63 percent of the requests were sent out by the lending library within nine days of receipt of the request, and of these 28 percent within four days. One library that was part of a telefacsimile network and employed a courier for pick-up and delivery, filled within the 0-4 day period, 195 requests which is 56 percent of the total loan requests of that library.[20]

Requests were satisfied at a level which exceeded all expectations in an on-campus delivery of library materials. During the first year, 69 percent were delivered within one working day; 12 percent were delivered later. This, of course, reflects use of material from the campus library to various professors in other parts of campus.[21]

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[19]Rollins, loc. cit.

[20]Martha W. West and Rowena A. Koch, Interlibrary Request and Loan Study, 1973 Report, U.S., Educational Resources Information Center, ERIC Document ED 104 423.

[21]Richard M. Dougherty, "The Evaluation of Campus Library Document Delivery Service," College and Research Libraries, 34:32-33, January, 1973.

Various studies suggest recommendations and guidelines that attempt to deal with speeding up the ILL process.

Stevens,[22] Ellis,[23] and the NYSILL task force[24] strongly recommend that the original request needs to be accurate and more complete with proper verification. Many times the citations on a request are incomplete, inaccurate, or garbled. For example, an author may not be correctly given and time is taken to search for an inaccurate item. So, there is a need for instructing librarians in small libraries in the proper method of making requests through workshops, field visits and publications.

More bibliographic access to local collections is likely to speed up the ILL process, since materials would be found locally. Many steps of the ILL process would be eliminated and delivery would be quicker over a shorter

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[22]Rolland E. Stevens, A Feasibility Study of Centralized and regionalized Interlibrary Loan Centers, U.S. Educational Resources Information Center, U.S., Educational Resources Information Center, ERIC Document ED 076 206, 1973, p. 32.

[23]Richard A. Ellis, Sarah Katharine Thomson, and Janet Weiss, NIL: a Study of Unfilled Interlibary Loan Requests in the NYSILL System (Washington, D.C.: Nelson Associates Inc., 1970), pp. 33-34.

[24]NYSILL Task Force, New York State Interlibrary Loan NYSILL, 1967-1977 (Albany, New York: New York State Library, 1978), p. 10.

distance. Hamilton,[25] Stevens,[26] West,[27] and the NYSILL Task Force[28] discuss this need. Also by adding retrospective holdings to data bases would make more materials accessible. While the National Union Catalog (NUC) can locate materials in major research libraries, it cannot tell us that the item is in a community college library across town.

Also, requests could be referred to the library most likely to have the ILL request, if broad subject categories were broken into sub-divisions. The right library would then be contacted by the system more readily, according to Ellis,[29] and the NYSILL Task Force.[30]

Staff shortages are cited by the NYSILL Task Force as a contributing factor which increases processing time of ILL requests.[31] Closely related to this is the need for funds to bolster sagging budgets as pointed out by Boucher.[32]

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[25]Beth A. Hamilton and William B. Ernest, Jr., Multitype Library Cooperation (New York: Bowker, 1977), p. 153.

[26]Stevens, A Feasibility Study of Centralized and Regionalized Interlibrary Loan Centers, pp. 5, 12, 35-36.

[27]West, op. cit., p. 18.

[28]NYSILL Task Force, op. cit., p. 45.

[29]Ellis, op. cit., p. 37.

[30]NYSILL Task Force, op. cit., p. 32.

[31]Ibid, p. 10.

[32]Boucher, Colorado Library Network Plan, pp. 20-21.

Stevens[33] mentions TMX could be used to speed communication, while telefacsimile did not prove to speed up the ILL process, as assumed, according to West's study.[34]

Sometimes communication proves to be a problem that fosters a time delay, as cited by Hybiak. Many times material is requested that is not loaned out by the State-wide Reference Center (Denver Public Library), or as she states, requests for periodical articles that are less than ten pages and costs to be carried by the patron, were not sent since the periodicals were unbound. It seems strange they didn't supply when unbound periodicals are easier to copy from.[35]

Hamilton discusses the OCLC will have an effect upon ILL procedures. With the advent of automated systems, the manually updated union catalog will become a thing of the past.[36]

> In both the information rich and information poor, there were three factors that were emphasized: accessibility (the importance of time in receiving information), the receipt of the right amount of information, and

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[33]Stevens, A Feasibility Study of Centralized and Regionalized Interlibrary Loan Centers, p. 33.

[34]West, loc. cit.

[35]Margaret Hybiak, "Factors Effecting Colorado Interlibrary Loan Service" (Denver: University of Denver, 1970), pp. 9-11. (Mimeographed.)

[36]Hamilton, op. cit., p. 152.

the usability of the information received.[37]

It is this statement that seems to encompass the need for improving the ILL process at whatever points are possible.

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[37]Ibid, p. 15.

CHAPTER 3

ANALYSIS OF THE DATA

Data was received from 57 of the 167 libraries contacted, which is a 34 percent response. Further percentages by System are included in Appendix 3.

This data shows ILL turnarcund time by using median times for each of the ILL steps in an ILL transaction. These steps include median times for the following:

1. Request made by borrowing library to the time it was called or sent in to the System headquarters.

2. Request received by the System to the time it is sent to CRC or local source.

3. Request received by CRC to the time sent to BCR or lending library.

4. Request received by BCR to the time BCR reports to the System or lending library.

5. Request received by lending library to the time material is sent out to borrowing library.

6. Time in the mail.

Since mail is moving every day, each day was tabulated, and therefore included Saturdays and Sundays in all the data collected. Unknowns were not used to tabulate medians, but were compiled on charts to show that some figures were missing on the collected data and to what extent.

The median turnaround time for all systems (Appendix 4-a)

is shown to be 9 days for a request going to CRC and BCR. If the request is filled from out of state, it takes 11 days. if the request goes to CRC and then the lending library in state, it takes 7 days. If the request is filled by a local source in the system it takes 4 days.

Further turnaround time medians are tabulated by author/title requests (appendix 4-b), periodical requests (appendix 4-c), and subject requests (appendix 4-a)

In order to have another measurement to compare to these steps data was used from the borrowing libraries form to see how long it took to have a request filled from the time the request was made to the day that material arrived. The following data was compiled for median turnaround time and is incorporated into appendix 4-a, 4-b, 4-c and 4-d:

All requests, all systems - 9 days

Author/title requests - 9 days

Periodical requests - 12 days

Subject requests - 7 days

In order to see the variations in time that is not apparent by a median time, charts of the actual data at each ILL step are included.[38]

The overall median time for each ILL step is seen in Appendix 4-a. But figures 2-14 show two charts for each step: a chart for that ILL step by the type of request, and a chart for that step by each system. BCR and the University

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[38]For complete ILL steps see p. 18 of this study.

of Colorado include one chart for each only. The variation of time on each ILL step ranges from the same day to some requests taking 30 or more days on that step alone. Also variation is evident at each ILL step for author/title requests, periodical requests and subject requests.

The overall median times used from the borrowing libraries form to show how long a request took to actually arrive was tabulated on appendix 4-a, 4-b, 4-c, 4-d. Further charts for the borrowing libraries are included in figures 15 and 16.

Other data which was collected in this study in appendix 5 showed how many requests borrowing libraries received (filled requests) during the study and how many were unfilled. Also the same information was compiled by the lending libraries on the requests they were able to fill or not fill.

Explanation of the following charts in Figures 2-16

Left column - indicates number of days

Other numbers - indicate how many requests took the number of days indicated on the corresponding left column.

A/T - Author/title requests

PER. - Periodical requests

SUBJ. - Subject requests

P - Pathfinder System

SW - Southwest System

TR - Three Rivers System

Median times are circled with arrows on overall medians.

Figure 2: Time for request to reach System Headquarters (or lending library) by Type of request:

	A/T				PER.				SUBJ.				All
	P	SW	TR	Total	P	SW	TR	Total	P	SW	TR	Total	Total
Unknown	11	18	73	102	4	2	2	8	5	1	16	22	132
Same Day	73	97	115	285	17	1	107	125	8	7	24	39	449
1	54	57	93	204	4	2	6	12	5	8	16	29	245
2	26	24	27	77		3		3	7	3	3	13	93
3	21	17	24	62	1		1	2	2	2	4	8	72
4	6	7	4	17		13	1	14	1	1		2	33
5	1	7	5	13		5	1	6			2	2	21
6	3	3		6					1	3		4	10
7	3	6		9									9
8		1	2	3									3
9	1	1	1	3			1	1					4
10						1		1					1
11													
12													
13	1	2		3		1		1					4
14													
15													
16		2		2									2
17													
18													
19													
20						1		1					1
21													
22													
23													
24						1		1					1
25													
26						2		2					2
27													
28													
29													
30+		1		1		3		3					4

Figure 3: Time for request to reach System Headquarters (or lending library) by Systems.

	P	SW	TR	Total
Unknown	20	21	91	132
Same Day	98	115	246	449
1	63	67	115	245
2	33	30	30	93
3	24	19	29	72
4	7	21	5	33
5	1	12	8	21
6	4	6		10
7	3	6		9
8		1	2	3
9	1	1	2	4
10		1		1
11				
12				
13	1	3		4
14				
15				
16		2		2
17				
18				
19				
20		1		1
21				
22				
23				
24		1		1
25				
26		2		2
27				
28				
29				
30+		4		4

Figure 4: Time for System Headquarters to fill request locally by Type of request.

	A/T				PER				SUBJ.				All
	P	SW	TR	Total	P	SW	TR	Total	P	SW	TR	Total	Total
Unknown	1			1	1			1					2
Same Day	30	29	255	314	33	1	19	53	14	9	17	40	407
1	40	24	2	66	8	1		9	4	5	3	12	87
2		5	4	9	8			8	1	3		4	21
3	3	5	6	14					1	2	1	4	18
4		6	1	7	10			10		3	1	4	21
5		1	3	4			1	1		1		1	6
6		2		2									2
7		4		4									4
8			1	1									1
9		1	1	2									2
10		2		2						1		1	3
11		1	1	2									2
12													
13		2		2									2
14		1		1									1
15													
16													
17													
18													
19													
20											1	1	1
21													
22													
23													
24													
25													
26													
27													
28													
29													
30+													

Figure 5: Time for System Headquarters to fill request locally by Systems.

	P	SW	TR	Total
Unknown	2			2
Same Day	77	39	291	407
1	52	30	5	87
2	9	8	4	21
3	4	7	7	18
4	10	9	2	21
5		2	4	6
6		2		2
7		4		4
8			1	1
9		1	1	2
10		3		3
11		1	1	2
12				
13		2		2
14		1		1
15				
16				
17				
18				
19				
20			1	1
21				
22				
23				
24				
25				
26				
27				
28				
29				
30+				

Figure 6: Time for System to send request to CRC or lending library by Type of request.

	A/T				PER.				SUBJ.				All
	P	SW	TR	Total	P	SW	TR	Total	P	SW	TR	Total	Total
Unknown		1		1						1		1	2
Same Day	26	4	297	327	10		81	91	4		49	53	471
1	156	40	39	235	8		7	15	11	1	25	37	287
2	8	26	27	61	1	1	2	4		2	4	6	71
3	22	23	23	68	5			5			7	7	80
4		9	19	28			1	1			2	2	31
5	1	5	8	14		7		7			1	1	22
6		14	7	21						2	1	3	24
7		7	12	19						3		3	22
8		4	8	12			3	3		3		3	18
9		1	7	8			2	2			1	1	11
10		2	2	4			1	1					5
11		3	1	4									4
12		2	1	3			2	2		1		1	6
13		7	2	9			1	1					10
14			2	2			1	1					3
15			1	1									1
16		1	1	2									2
17			1	1									1
18			1	1									1
19		1	1	2									2
20													
21													
22			1	1									1
23			1	1									1
24							2	2					2
25													
26													
27													
28							1	1					1
29													
30+										1		1	1

Figure 7: Time for System to send request to CRC or lending library by Systems.

	P	SW	TR	Total
Unknown		2		2
Same Day	40	4	427	471
1	175	41	71	287
2	9	29	33	71
3	27	23	30	80
4		9	22	31
5	1	12	9	22
6		16	8	24
7		10	12	22
8		7	11	18
9		1	10	11
10		2	3	5
11		3	1	4
12		3	3	6
13		7	3	10
14			3	3
15			1	1
16		1	1	2
17			1	1
18			1	1
19		1	1	2
20				
21				
22			1	1
23			1	1
24			2	2
25				
26				
27				
28			1	1
29				
30+		1		1

Figure 8: Time request in the mail by In State and Out of State and by Systems.

	In State	Out State	Total	P	SW	TR
Unknown	256	2	258	51	68	139
Same Day	7		7		3	4
1	95		95	48	9	38
2	132		132	(43)	21	68
3	(79)	2	(81)	15	(19)	(47)
4	55	4	59	20	12	27
5	27	1	28	4	10	14
6	46	(5)	51	5	8	38
7	5	2	7		2	5
8	5	1	6	2	3	1
9	11		11	1		10
10	3	1	4	2	1	1
11	2		2	1		1
12	1		1			1
13	9	1	10	1		9
14						
15		1	1		1	
16						
17						
18						
19						
20						
21						
22						
23		1	1		1	
24						
25						
26						
27						
28		2	2			2
29						
30+						

Figure 9: Time for CRC (Denver Public) to send request out (or status of request) by Type of request.

	A/T				PER.				SUBJ.				All Total
	P	SW	TR	Total	P	SW	TR	Total	P	SW	TR	Total	
Unknown			2	2	1		2	3			3	3	8
Same Day			1	1							3	3	4
1	95	93	140	328	4		12	16	3	1	24	28	392
2	18	26	44	88	7	1	5	13	8		20	28	129
3	13	29	34	76		2	3	5			20	20	101
4	21	16	25	62			7	7			8	8	77
5	7	19	6	32			4	4		1	7	8	44
6	2	7	10	19	2		1	3			2	2	24
7	4	2	4	10					1		1	2	12
8	1	3	3	7							1	1	8
9	3	1	1	5									5
10		1	1	2									2
11		1	1	2									2
12			2	2									2
13	1			1							3	3	4
14			1	1							1	1	2
15													
16													
17			2	2									2
18													
19													
20													
21													
22													
23													
24													
25													
26													
27													
28													
29													
30+													

Figure 10: Time for CRC (Denver Public) to send request out (or status of request) by Systems.

	P	SW	TR	Total
Unknown	1		7	8
Same Day			4	4
1	102	94	176	392
2	33	27	69	129
3	13	31	57	101
4	21	16	40	77
5	7	20	17	44
6	4	7	13	24
7	5	2	5	12
8	1	3	4	8
9	3	1	1	5
10		1	1	2
11		1	1	2
12			2	2
13	1		3	4
14			2	2
15				
16				
17			2	2
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30+				

Figure 11: Time for BCR (Bibliographic Center For Research) to handle a request by System.

	P	SW	TR	Total
Unknown				
Same Day	1		2	3
1	10	22	21	53
2	7	20	15	42
3	3	4	4	11
4	7	6	10	23
5	4	6	8	18
6			2	2
7		1		1
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30+				

Figure 12: Time for Lending Library to fill request by Type of request.

	A/T				PER				SUBJ				All
	P	SW	TR	Total	P	SW	TR	Total	P	SW	TR	Total	Total
Unknown													0
Same Day	53	16	111	180	6		5	11	13	6	26	45	236
1	3	11	38	52			8	8	3	9	6	18	78
2	7	7	19	33		1		1	4	1		5	39
3	2		10	12		2	4	6			1	1	19
4			2	2						1		1	3
5	4			4									4
6	2		1	3									3
7	2		1	3									3
8													
9	2		1	3									3
10													
11	1			1									1
12			1	1		1		1					2
13			1	1									1
14	1		1	2									2
15	1	1	1	3									3
16													
17			1	1									1
18													
19													
20													
21			1	1									1
22													
23													
24													
25													
26													
27													
28													
29													
30+													

Figure 13: Time for Lending Library to fill request by Systems.

	P	SW	TR	Total
Unknown				0
Same Day	72	22	142	236
1	6	20	52	78
2	11	9	19	39
3	2	2	15	19
4		1	2	3
5	4			4
6	2		1	3
7	2		1	3
8				
9	2		1	3
10				
11	1			1
12		1	1	2
13			1	1
14	1		1	2
15	1	1	1	3
16				
17			1	1
18				
19				
20				
21			1	1
22				
23				
24				
25				
26				
27				
28				
29				
30+				

Figure 14: Time for University of Colorado to fill request by Type of request.

	TR	A/T SW	Total	PER. TR	SW	Total	All Total
Unknown							0
Same Day	6		6	4		4	10
1	9	2	11	35	3	38	49
2	2	1	3	1		1	4
3	2	1	3	12		12	15
4		1	1				1
5	1		1				1
6					6	6	6
7				1		1	1
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30+							

Figure 15: Time for request to arrive at borrowing library by Type of request.

	A/T				PER.				SUBJ.				All
	P	SW	TR	Total	P	SW	TR	Total	P	SW	TR	Total	Total
Unknown			1	1									1
Same Day													0
1	6	1		7							1	1	8
2	7	1	3	11	1		2	3	3		2	5	19
3	3	7	2	12			1	1	1		1	2	15
4	14	7	17	38			3	3		2	6	8	49
5	9	8	13	30					5	2	7	14	44
6	11	16	27	54	4		3	7	2	3	3	8	69
7	17	12	25	54	3	1	6	10	(7)	(3)	(10)	(20)	84
8	(9)	(18)	22	49	1		1	2		2	6	8	59
9	5	4	(15)	(24)	(1)	1	10	12	2		3	5	(41)
10	5	13	15	33	1	1	6	8	1	2	7	10	51
11	9	5	7	21	2	1	4	7	1			1	29
12	10	4	10	24	1	1	8	(10)			5	5	39
13	8	4	15	27	1		(14)	15	4		1	5	47
14	4	6	3	13	2		6	8			3	3	24
15	2	5	10	17			6	6		1		1	24
16	4		6	10		(2)	13	15					25
17	7	2	5	14			3	3					17
18	1	1	3	5			3	3			1	1	8
19	2	3	9	14						1	1	2	16
20	4	1	2	7			1	1	2		1	3	11
21	1		3	4			1	1					5
22	1	1		2		1		1			1	1	4
23	2	4	7	13			1	1					14
24	3	1	4	8									8
25	1		5	6		1		1					7
26	2	1	2	5									5
27		3	1	4									4
28		1		1	1		2	3					4
29	1		2	3	1		1	2					5
30+	2	4	6	12		2		2					14

Figure 16: Time for request to arrive at borrowing library by Systems.

	P	SW	TR	Total
Unknown			1	1
Same Day				0
1	6	1	1	8
2	11	1	7	19
3	4	7	4	15
4	14	9	26	49
5	14	10	20	44
6	17	19	33	69
7	27	15	41	84
8	10	20	29	59
9	8	5	28	41
10	7	15	28	51
11	12	6	11	29
12	11	5	23	39
13	13	4	30	47
14	6	6	12	24
15	2	6	16	24
16	4	2	19	25
17	7	2	8	17
18	1	1	7	8
19	2	4	10	16
20	6	1	4	11
21	1		4	5
22	1	2	1	4
23	2	4	8	14
24	3	1	4	8
25	1	1	5	7
26	2	1	2	5
27		3	1	4
28	1	1	2	4
29	2		3	5
30+	2	6	6	14

CHAPTER 4

INTERPRETATION OF THE DATA

Many variables need to be considered in order to properly interpret the use of the data from this study. Consideration must be given for the limitations imposed by using median figures, the length of the study coupled with filled and unfilled ILL transactions, the response to the forms and letters sent out, incomplete information on some forms, and reserved or unavailable materials. These variables will be discussed in this chapter.

Although the median figures of ILL turnaround time appear to be quite satisfactory at each step of the ILL transaction, consideration must be given to those figures extending to 30 days on one step alone. If the longest times for each step were added together it could take as much as 113 days for a request to be filled or 78 days locally. See appendix 6 for further breakdown of the days at each step.

Since ILL transactions could start on any day during the one month period selected, many requests would be unfilled simply because they were requested near the latter part of the study. Also some requests took much longer than 30 days and usually no data was given to show how much longer that request may have taken or if it was filled. If a request was cancelled or never came during the study it was listed as unfilled. These unfilled were not tabulated into the medians

used at each ILL step.[39]

Since the study extended from April through May, many schools had little ILL transactions if any at all. When one particular month is selected, many librarians may have very little activity for ILL transactions at that time and a month before may have had many requests that were not then used in the data for this study. Several libraries have very limited hours and often are not open as long at certain times of the year. This limited the responses.

Data that was received sometimes was incomplete due to shortage of staff for filling out the forms and consequently some information was omitted. Also some libraries were in the process of moving locations and some had a change of librarian and staff.

Fortunately the main area of concern for turnaround time was possible to tabulate. Some facts requested on the forms were difficult to tabulate due to inadequate information for the reasons mentioned. Median times that were not tabulated included status reports, patron inquiry dates, pick up by the patron, date request cancelled, and verification dates. These were not items that were crucial for figuring out the turnaround time on ILL requests and were felt by this researcher to be sparsely recorded and therefore not of consequence in this study.

Many times a request has been properly handled, but

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[39]See appendix 5 for percentages.

the materials requested could be on reserve, lost or unavailable. From the information provided by CRC, dates for when materials were put on reserve were given; so the figure used was the date the reserve was placed by CRC. This study did not show how long some of those requests may take by the time the material actually became available. This could affect the number of days that some ILL transactions actually take. The status report is one way to at least know how this transaction has progressed.

Guidelines which may be used in this study are the median times tabulated in Appendix 4-a, 4-b, 4-c and 4-d. These medians show how a request progresses from the first ILL step to the final with receipt of the material.

Two methods were used to find median turnaround times: the first method used median times added together from each step, and the other method used median time for the whole ILL transaction from the borrowing libraries' data. The common median to both methods was 9 days.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This study is intended as a follow up to the Document Delivery Study Colorado Western Slope, by Newsham. This study did fulfill his recommendation that the lenth of the ILL process be studied.

His suggestion to study the time difference between United Parcel Service (UPS) and United States Postal Service (USPS) was not pursued in this study. This researcher felt that the USPS showed a reasonable time median. Mail moves over the weekends as well as week days and tabulations were made on that basis in this study. This does give an advantage over service by UPS, which operates on week days only. Also UPS was shown to be more expensive in the Document Delivery Study.

Two steps of the ILL process that seemed to show the most frequent delays and could most easily be remedied were the borrowing library where the request originates, and the System headquarters. The charts on figures 2, 4 and 6 indicate that many requests are not even handled at each of these ILL steps for up to 30 days. The percentage of requests which took longer than the median time at each step just mentioned is:

At Borrowing library - 27 percent
At System headquarters - 28 percent

Delays in filling a request are many times unavoidable since material may not be available when the request was made. Reasonable time is needed for delivery and often time is needed for a reserve item to become available. But the first two ILL steps could be shortened in time if borrowing libraries call in requests promptly and the System promptly deals with the request in some manner.

Periodicals in appendix 4-c had the lowest median time of all types of requests recorded. But from the borrowing libraries' figures on this chart, periodicals take the longest median time to receive. On figures 2, 6, 12, and 15, periodicals have a great fluctuation of median times compared to other types of requests.

Better procedures are recommended to improve the ILL turnaround time for periodicals at the first two steps of the ILL process as well as the lending library step. Figure 12 indicates for a periodical request, there is a delay at the lending library as well as the two steps previously mentioned.

Another area of concern that was touched on in this study, is that of unfilled requests. From the information given, it appears that status reports are very infrequent and most unfilled requests were never cancelled during the study, but just never arrived. As was mentioned earlier there are variables to consider with these figures, but the problem of unknown delays on a request are frequent.

So, there are two weak links in the turnaround time

on the Colorado Western Slope: the borrowing library where the request originates, and the System headquarters response to a request, and follow up on cancelled or delayed requests.

BIBLIOGRAPHY

Boucher, Virginia. Colorado Library Network Plan. Denver: Colorado State Library, 1977.

Colorado Department of Education. Colorado Plan for Library Development. Denver: Colorado Department of Education, 1967.

Dougherty, Richard M. "The Evaluation of Campus Library Document Delivery Service." College and Research Libraries, 34:32-34. January, 1973.

Ellis, Richard A., Sarah Katharine Thomson, and Janet Weiss. NIL: a Study of Unfilled Interlibrary Loan Requests in the NYSILL System. Washington, D.C.: Nelson Associates Inc., 1970.

Hamilton, Beth A., and William B. Ernest, Jr. Multitype Library Cooperation. New York: Bowker, 1977.

Hybiak, Margaret. "Factors effecting Colorado Interlibrary Loan Service; the problem of Unfilled Author-Title Requests." Denver: University of Denver, 1970. (Mimeographed.)

Martin, Susan K. Library Networks, 1976-77. White Plains, N.Y.: Knowledge Industry Pub., 1977.

Martinez, Ron. "Libraries: Colorado Conference Delegate Favors Information Networks." The Pueblo Chieftain, November 13, 1979.

National Commission on Libraries and Information Science. The Role of the School Library Media Program in Networking. Washington, D.C.: Task Force on the Role of the School Library Media Program in the National Program, September 1978.

Newsham, Michael A. Colorado Western Slope Document Delivery Study. Durango, Co.: Southwest Regional Library Service System, 1978.

NYSILL Task Force. New York State Interlibrary Loan NYSILL, 1967-1977. Albany, N.Y.: New York State Library, 1978.

Palmour, Vernon E., and others. A Study of the Characteristics, Costs, and Magnitude of Interlibrary Loans in Academic Libraries. Westport, Conn.: Greenwood Pub., Co., 1972.

Pan, Elizabeth, and Ron Miller. Materials Transfer a report of a Pilot Document Delivery Service November 1969 June 1970. U.S., Educational Resources Information Center, ERIC Document 056 721, 1971.

Rollins, Jane G. "The New York State Interlibrary Loan Program, NYSILL 1975-76 Annual Report." Bookmark, Summer 1977, pp. 113-116.

"Southwest Missouri Library Network Interlibrary Loan Study." Fall, 1977. (Mimeographed.)

Stevens, Rolland E. A Feasibility Study of Centralized and Regionalized Interlibrary Loan Centers. U.S., Educational Resources Information Center, ERIC Document 076 206, 1973.

Stevens, Rolland E. "A Study of Interlibrary Loan." College and Research Libraries, 35:336-43. September, 1974.

West, Martha W., and Rowena A. Koch. Interlibrary Request and Loan Study, 1973 Report. U.S., Educational Resources Information Center, ERIC Document 104 423, 1974.

Appendix 1-a

FORM FOR BORROWING LIBRARY

BORROWING LIBRARY FORM
Name of Your Library _____

LIBRARY SYSTEM _____

ATTACH TO ILL FORM
Book: Author/Title _____
Subject _____
Periodical _____

REQUEST FOLLOW UP	DATE	REQUEST FOLLOW UP	DATE
Request Made		Date of Postmark	
Request Called or Sent to System Headquarters		Dates Patron Inquired about ILL Item	
Or Request Sent in to LENDING LIBRARY		Patron Informed of ILL Arrival	
Status Report(s) Received		Patron Picked up Material Requested	
ILL Item Arrives		Date Request Cancelled	

NAME OF LENDING LIBRARY _____

COMMENTS

SYSTEM HEADQUARTERS FORM

Request Number _____

SYSTEM NAME _____

ATTACH TO ILL FORM

Book: Author/Title _____

Subject _____

Periodical _____

REQUEST FOLLOW UP	DATE
Request Received	
Resources Checked/Date Local_____ CRC___CTLF ____OCLC ____ Other_____	
Request Forwarded to Lending Library	
Report Status to Borrowing Library VIA Phone/Mail _____	
Request Verified? Yes _____ No _____	
COMMENTS	

FORM FOR LENDING LIBRARY

LENDING LIBRARY FORM
Name of Library _____

LIBRARY SYSTEM _____

ATTACH TO ILL FORM
Book: Author/Title _____
Subject _____
Periodical _____

REQUEST FOLLOW UP	DATE
Request Received	
Material Available	
Or Material Unavailable Lost _____ On Reserve _____ Reason: Owned But Out _____ Not Owned _____ Other _____	
Status Report Sent Out	
Material Mailed to Borrowing Library	
Request Verified? Yes _____ No _____ Date _____	
NAME OF BORROWING LIBRARY _____ COMMENTS	

Southwest Regional Library Service System

P.O. DRAWER B
DURANGO, COLORADO 81301
(303) 247-4782
WATS (800)332-5795

Dear

I am currently working on a LSCA Grant for the Southwest Regional Library System, which will test the ILL process in order to improve and speed up ILL requests.

The study will include the three Library Systems on the Western Slope with all libraries in these Systems participating over a one month period - April of this year. Every step of the ILL process will be tested in order to tabulate the turnaround time on ILL requests. The borrowing library, the System headquarters, and the lending library will fill out forms similar to your enclosed form, but tailored to suit their processes at each level.

Enclosed are forms to be used by simply attaching them to your ILL forms you are presently using. Fill in only the appropriate spaces with dates for each ILL request. If additional comments are necessary use the space provided or the backside of the sheet. The ILL requests to be used for the study are books (by subject or title/author), and periodicals as indicated on the top right corner of the form. Check off the appropriate line there.

The first day for recording this information on all ILL requests (books and periodicals) would be April14, and the last day would be May 14, 1980. After this date please pull off the completed sheets I've mailed to you and mail them back to me by May 30, 1980. No tabulations are required on your part. I will complete all the data collecting and have the results published for your information.

In addition, I will be making several ILL requests within the three Systems in order to test their progress from start to finish. This will especially show the difference in U.P. Service and the U.S. Postal Service. Any extra expenses for this study will be reimbursed to the appropriate libraries. This portion of the study could be conducted

Continued.....

starting very shortly and probably extend beyond the May 30 deadline already mentioned.

I certainly appreciate your assistance with filling out these forms for the month of April. I realize this is added figuring on your part, but feel the results gained from this study will help everyone in the future.

If you have questions related to this study or the forms being used, please contact me at 239 Davis St., Monte Vista, Co. 81144; home phone 852-4970; or if I cannot be reached call at work 754-2232. Please mail completed forms to my address. Also information has been sent to each of your System Directors, and they may be contacted for further information.

Again, many thanks for your cooperation in making this an effective study.

Sincerely

Sharon Thomas

Mrs. Sharon Thomas
LIBRARIAN
Center High School

NUMBER OF LIBRARIES PARTICIPATING IN STUDY

P	SW	TR	Total
Number of libraries contacted for the study:			
43	66	58	167
Number of libraries that responded:			
15	20	22	57
Percentage that responded:			
35%	30%	38%	34%

Appendix 4-a

MEDIAN TIMES FOR ALL TYPES OF REQUESTS

Step 1 Borrowing Library	Step 2 System	Step 3 CRC	Step 4 BCR	Step 5 Lending	Step 6 Mail	TOTAL	Total for Borrowing to receive
1 day	1 day	2 days	2 days	Same Day	3 in state	9 days	9 days
					5 out of state	11 days	
	OR						
	Local Source						
1 day	Same Day				3 days	4 days	

Appendix 4-b

MEDIAN TIMES FOR A/T REQUESTS

1 day	1 day	1 day	2 days	Same Day	3 days	8 days	9 days
	OR						
	Local Source						
1 day	Same Day				3 days	4 days	

Appendix 4-c

MEDIAN TIMES FOR PERIODICAL REQUESTS

Step 1 Borrowing Library	Step 2 System	Step 3 CRC	Step 4 BCR	Step 5 Lending	Step 6 Mail	TOTAL	Total for Borrowing to receive
Same Day	Same Day	2 days	1 day	1 day	3 days	7 days	12 days
	OR						
	Local Source						
Same Day	Same Day				3 days	3 days	

Appendix 4-d

MEDIAN TIMES FOR SUBJECT REQUESTS

1 day	1 day	2 days	2 days	Same Day	3 days	9 days	7 days
	OR						
	Local Source						
1 day	Same Day				3 days	4 days	

FILLED AND UNFILLED REQUESTS

P	SW	TR	Total
Number of requests filled for Borrowing libraries:			
193	157	428	778
Number of requests unfilled for Borrowing libraries:			
62	140	138	340
Percentage that was filled for Borrowing libraries:			
76%	53%	76%	70%
Number of requests filled by Lending libraries' figures:			
104	56	253	413
Number of requests unfilled by Lending libraries' figures:			
33	3	68	104
Percentage that was filled by Lending libraries' figures:			
76%	95%	79%	80%

Appendix 6

LONGEST TIMES FOR EACH ILL STEP

Step 1 Borrowing Library	Step 2 System	Step 3 CRC	Step 4 BCR	Step 5 Lending	Step 6 Mail	TOTAL	Total for Borrowing to receive
30 days	30 days OR Local Source	17 days	7 days	21 days	28 days	113 days	------
30 days	20 days				28 days	78 days	